Acta Neuropathologica

Volume 54 · 1981

Organ of the Research Group for Neuropathology, of the Research Group for Comparative Neuropathology, and of the Research Group for Neurooncology of the World Federation of Neurology

Editorial Board

W. Blackwood, Sevenoaks/Kent
L. van Bogaert, Wilrijk
R. Escourolle, Paris
K. Jellinger, Wien
I. Klatzo, Bethesda
W. Krücke, Frankfurt/Main
G. Peters, München
L. J. Rubinstein, Charlottesville
F. Seitelberger, Wien
H. Shiraki, Tokyo
K. J. Zülch, Köln-Merheim

Managing Editors

K. Jellinger, F. Seitelberger

Advisory Board

H. Bernheimer, Wien
K. H. Blinzinger, München
A. N. Davison, London
R. Fankhauser, Bern
R. Friede, Zürich
N. Grčević, Zagreb
H. Hager, Giessen
R. Hassler, Frankfurt/Main
H. Jatzkewitz, München
St. Környey, Budapest
W. G. P. Mair, London
J. J. Martin, Wilrijk
W. Müller, Köln-Lindenthal
E. P. Richardson, Jr., Boston
P. Sourander, Göteborg
P. K. Thomas, London
H. Webster, Bethesda
E. Wildi, Genève
H. M. Wisniewski, New York

Springer International

Acta Neuropathologica was founded in 1961. Editorial Board: **I. Bertrand,** Paris, **W. Blackwood,** Sevenoaks/Kent, **L. van Bogaert,** Wilrijk, **E. Frauchiger,** Bern, **W. Haymaker,** Moffet Field, **W. Krücke,** Frankfurt/Main, **F. Lüthy,** Zürich, **W. Scholz,** München, **F. Seitelberger,** Wien. Managing Editor: **F. Seitelberger.** Berlin Göttingen Heidelberg: Springer-Verlag, Wien: Springer-Verlag.

The exclusive copyright for all languages and countries, including the right for photomechanical and other reproductions, is transferred to the publisher.

The quotation of registered names, trademarks, etc. in this journal does *not* imply, even in the absence of a specific statement, that such names are exempt from laws and regulations protecting trademarks, etc. and therefore free for general use.

Authors of this journal can benefit from library and photocopy fees collected by VG WORT if certain conditions are met. If an author lives in the Federal Republic of Germany or in West Berlin it is recommended that he contacts Verwertungsgesellschaft WORT, Abteilung Wissenschaft, Goethestraße 49, D-8000 München 2, for detailed information.

Springer-Verlag, Berlin Heidelberg New York

Springer-Verlag, Wien New York

Printed in Germany – ©Springer-Verlag GmbH & Co KG, Berlin Heidelberg 1981

Printers: Wiesbadener Graphische Betriebe GmbH, D-6200 Wiesbaden

Contents

Abrahams, P. H., Day, A., Allt, G.: The Node of Ranvier in Early Wallerian Degeneration: A Freeze-Fracture Study . 95
Ackermann, H. P., Ulrich, J., Heitz, Ph. U.: Experimental Allergic Encephalomyelitis. Exsudate and Cellular Infiltrates in the Spinal Cord of Lewis Rats 149
Ahonen, R. E.: Peripheral Neuropathy in Uremic Patients and in Renal Transplant Recipients 43
Allt, G., see Abrahams, P. H., et al. 95
Amano, N., see Yagishita, S., et al. 239
Asa, S. L., Kovacs, K., Bilbao, J. M., Penz, G.: Immunohistochemical Localization of Keratin in Craniopharyngiomas and Squamous Cell Nests of the Human Pituitary 257
Askansas, V., see Odenwald, W. F. 135

Baloyannis, St. J., Kim, S. U.: Morphological Alterations of Purkinje Cell Axons and Presynaptic Terminals in Organotypic Cerebellar Cultures Exposed to Ionizing Irradiation 301
Berlet, H. H., see Volk, B., et al. 19
Bestetti, G., Rossi, G. L., Zemp, C.: Changes in Peripheral Nerves of Rats Four Months After Induction of Streptozotocin Diabetes. A Qualitative and Quantitative Study 129
Bilbao, J. M., see Asa, S. L., et al. 257
Bonilla, E., see Schotland, D. L., et al. 189
Bosch de Aguilar, Ph. van den, see Vanneste, J. 83

Cesaro, P., see Nguyen-Legros, J., et al. 101
Chinookoswong, N., see Kohn, D. F., et al. 211
Choi, B. H., Holt, J. T., McDonald, J. V.: Occult Malignant Astrocytoma of Pons with Extracranial Metastasis to Bone Prior to Craniotomy 269
Choi, B. H., Kudo, M., Lapham, L. W.: A Golgi and Electron-microscopic Study of Cerebellum in Methylmercury-poisoned Neonatal Mice 233
Chou, S. M., see Kohn, D. F., et al. 211
Chui, E., see Wolman, M., et al. 55
Collan, Y., see Ylikoski, J., et al. 157
Cullen, M. J., see Watkins, S. C. 329

Day, A., see Abrahams, P. H., et al. 95
Deck, J. H. N., Rubinstein, L. J.: Glial Fibrillary Acidic Protein in Stromal Cells of Some Capillary Hemangioblastomas: Significance and Possible Implications of an Immuno-peroxidase Study 173

Fankhauser, R., see Vandevelde, M., et al. 31
Finseth, I., see Torvik, A., et al. 143
Fujishima, M., see Ogata, J., et al. 183
Fujiwara, K., see Wolman, M., et al. 55
Funata, N., see Ökeda, R., et al. 1

Gabreëls, F. J. M., see Renier, W. O., et al. 11
Gay, M., see Nguyen-Legros, J., et al. 101
Geelen, J. A. G., see Renier, W. O., et al. 11
Gilbert, J. J., see Michaud, J. 113
Giromini, D., Peiffer, J., Tzonos, T.: Occurrence of a Primary Burkitt-Type Lymphoma of the Central Nervous System in an Astrocytoma Patient. A Case Report 165
Gode, G. R., see Sandhyamani, S., et al. 247
Goebel, H. H., see Langer, J., et al. 199
Goto, N., Kaneko, M.: Olivary Enlargement: Chronological and Morphometric Analyses 275

Hanawa, S., see Matsushita, M., et al. 89
Heitz, Ph. U., see Ackermann, H. P., et al. 149
Higashino, F., see Okeda, R., et al. 1
Hildebrand, C., see Risling, M. 169
Holt, J. T., see Choi, B. H., et al. 269
Hustinx, T. W. J., see Renier, W. O., et al. 11

Iannucci, A. M., see Simonati, A., et al. 311
Iizuku, R., see Kosaka, K., et al. 253
Iqbal, K., see Merz, P. A., et al. 63
Ishitsuka, T., see Ogata, J., et al. 183
Itoh, Y., see Yagishita, S., et al. 239

Jaspar, H. H. J., see Renier, W. O., et al. 11

Kalimo, H., see Söderfeldt, B., et al. 219
Kalla, G. N., see Sandhyamani, S., et al. 247
Kaneko, M., see Goto, N. 275
Kim, S. U., see Baloyannis, J. St. 301
Kirkeby, S.: Enzyme Reactions in Beige Mouse Muscle with Central Cores 325
Klatzo, I., see Wolman, M., et al. 55
Klein, C., see Volk, B., et al. 19
Koestner, A., see Krakowka, S., et al. 75
Kohn, D. F., Chinookoswong, N., Chou, S. M.: A New Model of Congenital Hydrocephalus in the Rat 211
Kondo, T., see Kosaka, K., et al. 253
Kosaka, K., Iizuku, R., Mizutani, Y., Kondo, T., Nagatsu, T.: Striatonigral Degeneration Combined with Alzheimer's Disease 253
Kosaka, K., see Matsushita, M., et al. 89
Kovacs, K., see Asa, S. L., et al. 257
Krakowka, S., Wallace, A. L., Koestner, A.: Shared Antigenic Determinants Between Brain and Thymus-derived Lymphocytes in Dogs. Implications Regarding the Significance of Antimyelin Antibodies in Demyelination 75
Kristensen, B., see Vandevelde, M., et al. 31
Kristensen, F., see Vandevelde, M., et al. 31
Kudo, M., see Choi, B. H., et al. 233
Kuziez, M., see Tomita, T., et al. 161

Langer, J., Goebel, H. H., Veit, S.: Eccrine Sweat Glands Are Not Innervated in Hereditary Sensory Neuropathy Type IV. An Electron-microscopic Study 199
Lapham, L. W., see Choi, B. H., et al. 233
Laursen, H., Westergaard, E.: The Permeability of the Blood-Brain Barrier and Cell Membranes to Horseradish Peroxidase in Hyperammonaemia 293
Lommen, E. J. P., see Renier, W. O., et al. 11

Maletz, J., see Volk, B., et al. 19
Mall, G., see Volk, B., et al. 19
Manabe, M., see Okeda, R. 1
Masuzawa, T., Shimabukuro, H., Yoshimizu, N., Sato, F.: Ultrastructure of Disseminated Choroid Plexus Papilloma . 321
Matsushita, M., Oyanagi, S., Hanawa, S., Shiraki, H., Kosaka, K.: Nasu-Hakola's Disease (Membranous Lipodystrophy). A Case Report 89
McDonald, J. V., see Choi, B. H., et al. 269
Merz, P. A., Somerville, R. A., Wisniewski, H. M., Iqbal, K.: Abnormal Fibrils from Scrapie-infected Brain 63
Michaud, J., Gilbert, J. J.: Multiple System Atrophy with Neuronal Intranuclear Hyaline Inclusions. Report of a New Case with Light and Electron Microscopic Studies . . . 113
Miller, C. A., Shulman, I., Taylor, C.: Demyelination with Hemophagocytic Lymphohistiocytosis of the CNS . . . 153
Miyazaki, Y., see Okeda, R., et al. 1
Mizutani, Y., see Kosaka, K., et al. 253
Morello, F., see Simonati, A., et al. 311

Nagatsu, T., see Kosaka, K., et al. 253
Nakatomi, Y., see Ogata, J., et al. 183
Nguyen-Legros, J., Cesaro, P., Gay, M., Pollin, B.: Evolution du lieu de stockage du dextran-fer transporté par le flux axonal rétrograde dans le système nerveux central du rat . 101
Evolution of the Storage Site of Iron-Dextran After Retrograde Axonal Transport in the Rat Central Nervous System
Nishimoto, K., see Wolman, M., et al. 55
Norman, M. G., Thurber, L. A., Woolley, H. E.: Abnormal Leptomeninges and Vessels Causing Fetal Hydrocephalus: Diagnosis of Hydrocephalus at 19 Weeks Gestation by Ultrasound 283

Odenwald, W. F., Askansas, V.: Ultrastructural and Cytochemical Characteristics of Cultured Rat Schwann Cells . 135
Ogata, J., Fujishima, M., Tamaki, K., Nakatomi, Y., Ishitsuka, T., Omae, T.: Vascular Changes Underlying Cerebral Lesions in Stroke-prone Spontaneously Hypertensive Rats. A Serial Section Study 183
Okeda, R., Funata, N., Takano, T., Miyazaki, Y., Higashino, F., Yokoyama, K., Manabe, M.: The Pathogenesis of Carbon Monoxide Encephalopathy in the Acute Phase — Physiological and Morphological Correlation 1
Oldfors, A.: Nerve Fibre Degeneration of the Central and Peripheral Nervous Systems in Severe Protein Deprivation in Rats 121
Oldfors, A., Sourander, P.: Storage of Lipofuscin in Neurons in Mucopolysaccharidosis. Report on a Case of Sanfilippo's Syndrome with Histochemical and Electron-microscopic Findings 287
Olsson, Y., see Söderfeldt, B., et al. 219
Omae, T., see Ogata, J., et al. 183
Oyanagi, S., see Matsushita, M., et al. 89

Palva, T., see Ylikoski, J., et al. 157
Penz, G., see Asa, S. L., et al. 257
Peiffer, J., see Giromini, D., et al. 165
Pollin B., see Nguyen-Legros, J., et al. 101
Prince, F. P.: Ultrastructural Aspects of Myogenesis Found in Neoplasms 315

Renier, W. O., Gabreëls, F. J. M., Hustinx, T. W. J., Jaspar, H. H. J., Geelen, J. A. G., Van Haelst, U. J. G., Lommen, E. J. P., Ter Haar, B. G. A.: Connatal Pelizaeus-Merzbacher Disease with Congenital Stridor in Two Maternal Cousins . . . 11
Risling, M., Hildebrand, C.: Abnormally High Content of Unmyelinated Axon Profiles in the Ventral Root L 7 of a Cat with an Abdominal Neoplasm 169
Rizzuto, N., see Simonati, A., et al. 311
Rossi, G. L., see Bestetti, G., et al. 129
Roy, S., see Sandhyamani, S., et al. 247
Rubinstein, L. J., see Deck, J. H. N. 173

Sandhyamani, S., Roy, S., Gode, G. R., Kalla, G. N.: Pathology of Rabies: A Light- and Electron-microscopical Study with Particular Reference to the Changes in Cases with Prolonged Survival 247
Sato, F., see Masuzawa, T., et al. 321
Schotland, D. L., Bonilla, E., Wakayama, Y.: Freeze Fracture Studies of Muscle Plasma Membrane in Human Muscular Dystrophy 189
Shimabukuro, H., see Masuzawa, T., et al. 321
Shiraki, H., see Matsushita, M., et al. 89
Shulman, I., see Miller, C. A., et al. 153
Siesjö, B., see Söderfeldt, B., et al. 219
Simonati, A., Vio, M., Iannucci, A. M., Toso, V., Morello, F., Rizzuto, N.: Gliomatosis Cerebri Diffusa. A Case Report . 311
Söderfeldt, B., Kalimo, H., Olsson, Y., Siesjö, B.: Pathogenesis of Brain Lesions Caused by Experimental Epilepsy. Light- and Electron-microscopic Changes in the Rat Cerebral Cortex Following Bicuculline-induced Status Epilepticus . 219
Somerville, R. A., see Merz, P. A., et al. 63
Sourander, P., see Oldfors, A. 287
Spatz, M., see Wolman, M., et al. 55
Spira, A. W., see Wyse, J. P. H. 203
Stenwig, A. E., see Torvik, A., et al. 143

Takano, T., see Okeda, R., et al. 1
Tamaki, K., see Ogata, J., et al. 183
Taylor, C., see Miller, C. A., et al. 153
Ter Haar, B. G. A., see Renier, W. O., et al. 11
Thurber, L. A., see Norman, M. G., et al. 283
Tiedemann, M., see Volk, B., et al. 19
Tomita, T., Kuziez, M., Watanabe, I.: Double Tumors of Anterior and Posterior Pituitary Gland 161
Torvik, A., Stenwig, A. E., Finseth, I.: The Pathology of Experimental Obstructive Hydrocephalus. A Scanning Electron Microscopic Study 143
Toso, V., see Simonati, A., et al. 311
Towfighi, J.: Effects of Chronic Vitamin E Deficiency on the Nervous System of the Rat 261
Tzonos, T., see Giromini, D., et al. 165

Ulrich, J., see Ackermann, H. P., et al. 149

Vandevelde, M., Fankhauser, R., Kristensen, F., Kristensen, B.: Immunoglobulins in Demyelinating Lesions in Canine Distemper Encephalitis. An Immunohistological Study . 31
Van Haelst, U. J. G., see Renier, W. O., et al. 11
Vanneste, J., Bosch de Aguilar, Ph. van den: Mitochondrial Alterations in the Spinal Ganglion Neurons in Ageing Rats 83
Veit, S., see Langer, J., et al. 199
Vio, M., see Simonati, A., et al. 311
Volk, B., Maletz, J., Tiedemann, M., Mall, G., Klein, C., Berlet, H. H.: Impaired Maturation of Purkinje Cells in the Fetal Alcohol Syndrome of the Rat. Light and Electron Microscopic Investigations 19

Wakayama, Y., see Schotland, D. L., et al. 189
Wallace, A. L., see Krakowka, S., et al. 75
Wang Nan, see Yagishita, S., et al. 239
Watanabe, I., see Tomita, T., et al. 161
Watkins, S. C., Cullen, M. J.: An Unusual Organelle in a Case of Duchenne Muscular Dystrophy 329
Westergaard, E., see Laursen, H. 293
Wilmes, F., see Wolman, M., et al. 55
Wisniewski, H. M., see Merz, P. A., et al. 63
Wolman, M., Klatzo, I., Chui, E., Wilmes, F., Nishimoto, K., Fujiwara, K., Spatz, M.: Evaluation of the Dye-Protein Tracers in Pathophysiology of the Blood-Brain Barrier . . 55
Woolley, H. E., see Norman, M. G., et al. 283
Wyse, J. P. H., Spira, A. W.: Ultrastructural Evidence of a Peripheral Nervous System Pattern of Myelination in the Avascular Retina of the Guinea Pig 203

Yagishita, S., Itoh, Y., Wang Nan, Amano, N.: Reappraisal of the Fine Structure of Alzheimer's Neurofibrillary Tangles 239
Ylikoski, J., Collan, Y., Palva, T.: Further Observations on the Eighth Nerve in Menière's Disease 157
Yokoyama, K., see Okeda, R., et al. 1
Yoshimizu, N., see Masuzawa, T., et al. 321

Zemp, C., see Bestetti, G., et al. 129

Indexed in Current Contents